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10/710,837	08/05/2004	MING-KUAN QIAN	ACMP0107USA	4836

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NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION
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EXAMINER	
WASHINGTON, JAMARES	

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
06/14/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com
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Office Action Summary	Application No.	Applicant(s)	
	10/710,837	QIAN, MING-KUAN	
	Examiner	Art Unit	
	Jamares Washington	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. Claim 3is objected to because of the following informalities:

Regarding claim 3, applicant references the "buffer component" of claim 2. Claim 3, however, is dependent from claim 1. It is clear that claim 3 should depend from claim 2 to find antecedent basis for further limiting the "buffer component" of claim 2.

Hereinbelow, claim 3 shall depend from claim 2 for purposes of examination. Applicant is required to make the necessary corrections in future correspondence.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiroyuki Takahara (US 20010043371 A1).

Regarding claim 1, Takahara discloses a scanner ("...image reader..." at paragraph [8]) comprising:

a housing ("...a housing for supporting the light source and the reading element" at paragraph [9]);

a transparent platform installed on the housing (Fig. 17 numeral 101);

a shaft installed inside the housing (Fig. 17 numeral 106); and

a scanning module installed inside the housing (Fig. 17 numeral 102) and on the shaft in a movable manner ("The positioning of the sensor-holding frame 103 and the moving holding frame 104, in the longitudinal direction of the line sensor unit 102, is achieved by fitting a protrusion 103c of the sensor-holding frame 103 to a groove 104c in the moving holding frame 104. The moving holding frame 104 is guided by a guide bar 106 affixed to a body base 105" at paragraph [6]) comprising:

a sensing module for scanning a document on the transparent platform and transforming it into a digital signal ("...an image sensor unit comprising a light source for illuminating an original; a reading element for reading an image on the original" at paragraph [10]); and

a sensor carriage comprising:

a base for carrying the sensing module ("...a holding member for holding the image sensor unit" at paragraph [11]); and

a buffer pad connected to the base in a rotatable manner for contacting the transparent platform and fixing the sensing module in the sensor carriage ("Round holes 2c and 2d are provided at both ends of the line sensor unit 2, as shown in the cross sectional view of FIG. 5. Spacers 51a and 51b, made of a resinous material with good slidability, are inserted into the round holes 2c and 2d, respectively. These spacers 51a and 51b contact the original-holding glass member 1. The line sensor unit 2 is rotatably held by a unit-holding member 4, by fitting holes (bearings for allowing rotation), disposed at both ends of the unit-holding member 4, onto fitting portions 2a1 and 2b1, disposed at the line sensor unit 2" at paragraph [33]). In Fig. 7A, Takahara shows the sensor unit (2) containing the spacer (top left of numeral 2) connected to the base (4) in a rotatable manner. When the sensor/spacer contacts the glass, the sensor is held in the carriage by the force exerted on the platen glass.

Regarding claim 2, Takahara discloses the scanner of claim 1, further comprising a buffer component installed under the scanning module and connected to the shaft in a movable manner for elastically supporting the scanning module and ensuring the scanning module is close to the transparent platform ("During the running of the belt 55, the line sensor unit 2 is biased towards

the original-holding glass member 1 by coil springs 7a and 7b. This biasing force ensures positioning of the V-shaped inclined surfaces of the unit-holding member 4 on the guide bar 6, so that the unit-holding member 4 is guided on the guide bar 6 without rattling" at paragraph [37]).

Regarding claim 3, Takahara discloses the scanner of claim [2], wherein the buffer component is a spring mechanism ("...coil springs 7a and 7b..." at paragraph [37]).

Regarding claim 4, Takahara discloses the scanner of claim 1, wherein the sensor carriage further comprises an elastic component installed on the bottom of the base for vertically supporting the sensing module ("On the other hand, the unit-holding member 4 is biased towards the guide bar 6 by the reaction force of the coil springs 7a and 7b" at paragraph [37]. Shown in Fig. 7B located on the bottom portion of the "unit holding member – numeral 4").

Regarding claim 5, Takahara discloses the scanner of claim 4, wherein the elastic component is a fragment (Fig. 3. The fragment of the unit-holding member 4 supporting the coil springs 7a and 7b). The support from these fragments and the springs form a union that supports the sensing module vertically.

Regarding claim 6, Takahara discloses the scanner of claim 4, wherein the elastic component is a spring ("...coil springs 7a and 7b..." at paragraph [37]).

Regarding claim 7, Takahara discloses the scanner of claim 1, further comprising at least one wearing spacer installed on the buffer pad for contacting the transparent platform ("Spacers 51a and 51b, made of a resinous material with good slidability...These spacers 51a and 51b contact the original-holding glass member 1" at paragraph [33]). Spacers made of resinous material with good slidability would constitute a wearing spacer.

Regarding claim 8, Takahara discloses the scanner of claim 7, wherein the wearing spacer is a flange of wear-resisting material ("Spacers 51a and 51b, made of a resinous material with good slidability..." at paragraph [33]). The "good slidability" of the spacer indicates the resinous material is wear resistant. Material with good slidability would be slow to wear, as friction would cause wear. Good slidability would indicate a lack of friction.

Regarding claim 9, Takahara discloses the scanner of claim 1, wherein the sensing module comprises a contact image sensor (CIS), a plurality of charge-coupled devices, or a plurality of complementary metal-oxide semiconductors ("It is still another object of the present invention to provide an image sensor unit comprising a light source for illuminating an original; a reading element for reading an image on the original..." at paragraph [10]). Contact image sensors place the image sensor in near direct contact with the object to be scanned in contrast to using mirrors to bounce light to a stationary sensor. The reference indicates that an object of the invention is to provide an image reader capable of performing reading operations with high precision by placing the image sensor in close contact with the platen glass. One of the claimed limitations is satisfied, thus the claim limitation as a whole is satisfied due to the "or" usage.

Regarding claim 10, Takahara discloses a scanner ("...image reader..." at paragraph [8]) comprising:

a housing ("...a housing for supporting the light source and the reading element" at paragraph [9]);

a transparent platform installed on the housing (Fig. 17 numeral 101);

a shaft installed inside the housing (Fig. 17 numeral 106); and

a scanning module installed inside the housing (Fig. 17 numeral 102) and on the shaft in a movable manner for scanning a document on the transparent platform ("The positioning of the sensor-holding frame 103 and the moving holding frame 104, in the longitudinal direction of the line sensor unit 102, is achieved by fitting a protrusion 103c of the sensor-holding frame 103 to a groove 104c in the moving holding frame 104. The moving holding frame 104 is guided by a guide bar 106 affixed to a body base 105" at paragraph [6]); and

a buffer component connected to the scanning module in union-forming structure (Fig. 5 numeral 51a and numeral 2 form a union when the spacer is placed in the hole 2c provided at the end of the line sensor.) and connected to the shaft in a movable manner for elastically supporting the scanning module and ensuring the scanning module is close to the transparent platform ("During the running of the belt 55, the line sensor unit 2 is biased towards the original-holding glass member 1 by coil springs 7a and 7b. This biasing force ensures positioning of the V-shaped inclined surfaces of the unit-holding member 4 on the guide bar 6, so that the unit-holding member 4 is guided on the guide bar 6 without rattling" at paragraph [37]).

Regarding claim 11,Takahara discloses the scanner of claim 10, further comprising a sensing module for scanning a document on the transparent platform and transforming it into a digital signal ("...an image sensor unit comprising a light source for illuminating an original; a reading element for reading an image on the original" at paragraph [10]), and a sensor carriage comprising a base for carrying the sensing module ("...a holding member for holding the image sensor unit" at paragraph [11]) and a buffer pad connected to the base in a rotatable manner for contacting the transparent platform and fixing the sensing module in the sensor carriage ("Round holes 2c and 2d are provided at both ends of the line sensor unit 2, as shown in the cross sectional view of FIG. 5. Spacers 51a and 51b, made of a resinous material with good slidability, are inserted into the round holes 2c and 2d, respectively. These spacers 51a and 51b contact the original-holding glass member 1. The line sensor unit 2 is rotatably held by a unit-holding member 4, by fitting holes (bearings for allowing rotation), disposed at both ends of the unit-holding member 4, onto fitting portions 2a1 and 2b1, disposed at the line sensor unit 2" at paragraph [33]).

Regarding claim 12, Takahara discloses the scanner of claim 11, further comprising at least one wearing spacer installed on the buffer pad for contacting the transparent platform ("Spacers 51a and 51b, made of a resinous material with good slidability...These spacers 51a and 51b contact the original-holding glass member 1" at paragraph [33]).

Regarding claim 13, discloses the scanner of claim 12, wherein the wearing spacer is a flange of wear-resisting material ("Spacers 51a and 51b, made of a resinous material with good

slidability..." at paragraph [33]). The "good slidability" of the spacer indicates the resinous material is wear resistant. Material with good slidability would be slow to wear, as friction would cause wear. Good slidability would indicate a lack of friction.

Regarding claim 14, Takahara discloses the scanner of claim 11, wherein the sensor carriage further comprises an elastic component installed on the bottom of the base for vertically supporting the sensing module ("On the other hand, the unit-holding member 4 is biased towards the guide bar 6 by the reaction force of the coil springs 7a and 7b" at paragraph [37]).

Regarding claim 15, discloses the scanner of claim 14 wherein the elastic component is a fragment (Fig. 3. The fragment of the unit-holding member 4 supporting the coil springs 7a and 7b).

Regarding claim 16, Takahara discloses the scanner of claim 14, wherein the elastic component is a spring ("...coil springs 7a and 7b..." at paragraph [37]).

Regarding claim 17, Takahara discloses the scanner of claim 11, wherein the sensing module comprises a contact image sensor (CIS) ("It is still another object of the present invention to provide an image sensor unit comprising a light source for illuminating an original; a reading element for reading an image on the original..." at paragraph [10]).

Regarding claim 18, Takahara discloses the scanner of claim 10, wherein the buffer component is a spring mechanism ("...coil springs 7a and 7b..." at paragraph [37]).

Regarding claim 19, Takahara discloses the scanner of claim 10, wherein the buffer component comprises:

a semicircular elastic body for connecting with the shaft ("Sliding portions 4d and 4e, which are made of a resinous material with good slidability and which have a V-shaped inclined surface, are integrally formed on the unit-holding member 4. When the unit-holding member 4 is guided along a round guide bar 6, the V-shaped inclined surfaces of the two sliding portions 4d and 4e of the unit-holding member 4 are in contact with the round guide bar 6" at paragraph [35] and Fig. 3 numerals 4d and 4e). The resinous make-up of the sliding portions constitutes an elastic solid member.

an elastic body installed above the semicircular elastic body for supporting the scanning module upwardly, making the scanning module close to the transparent platform ("On the other hand, the unit-holding member 4 is biased towards the guide bar 6 by the reaction force of the coil springs 7a and 7b" at paragraph [37]. Shown in Fig. 7B located on the bottom portion of the "unit holding member – numeral 4"), and positioning the scanning module on the shaft aligned with the semicircular elastic body (downward force of the coil springs shown in Fig. 7B).

Regarding claim 20, Takahara discloses the scanner of claim 19, wherein the elastic body comprises:

a circular elastic body installed above the semicircular elastic body for vertically supporting the scanning module and ensuring the scanning module is close to the transparent platform aligned with the semicircular elastic body ("On the other hand, the unit-holding member 4 is biased towards the guide bar 6 by the reaction force of the coil springs 7a and 7b" at paragraph [37]. Shown in Fig. 7B located on the bottom portion of the "unit holding member – numeral 4"); and

two arched elastic bodies for positioning the scanning module on the shaft (Fig. 3 numerals 4d and 4e).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamares Washington whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jamares Washington
Junior Examiner
Art Unit 2625

JW

June 6, 2007

AUNG S. MOE
SUPERVISORY PATENT EXAMINER
6/8/07